

Course Code:	ENGG434
Course Name:	ENGINEERING ETHICS
Credit / ECTS:	3 Credit/ 5 ECTS
Catalogue Description:	Ethics and professionalism, moral reasoning, moral frameworks, ethical theories, commitment of safety, risks, workplace responsibilities, honesty, equal opportunity: non-discrimination, confidentiality and conflicts of interest, environmental ethics, green engineering, sustainable development, dilemma resolution, professional rights, whistleblowing. Code of ethics: The Institute of Electrical and Electronics Engineers, American Institute of Chemical Engineers, American Society of Civil Engineers, Software Engineering. Basic ethics training. Engineering professional training, job responsibilities and professionalism, labor law and ethics. Case studies on the topics of engineering professional ethics, labor safety, environmental protection. Computers and ethics, data protection, computer failures. Global issues.
Course Objectives:	This course is designed to introduce undergraduate engineering students to the concepts, theory and practice of engineering ethics. The topics cover professionalism, moral reasoning and codes of ethics, moral frameworks, commitment of safety, workplace responsibilities, environmental ethics, green engineering, dilemma resolution. Basic ethics training, job responsibilities, labor law and ethics, case studies.
Learning Outcome (s):	<ol style="list-style-type: none"> 1- Develop comprehension of professional and ethical responsibilities of engineers, including code of ethics of professional societies. 2- Be able to address and resolve problems arising from questionable practice. 3- Develop critical thinking skills and professional judgement and understand practical difficulties of bringing about change. 4- Develop a professional ethical identity to carry forward in their working life . 5- Ability to recognize the existence of ethical issues.
Weekly Topics	<ol style="list-style-type: none"> 1- Ethics and Professionalism 2- Ethics and Professionalism 3- Moral Reasoning and Codes of Ethics 4- Moral Reasoning and Codes of Ethics 5- Moral Frameworks 6- Engineering Ethics Case Studies 7- Engineering Ethics Case Studies 8- Engineering as social Experimentation: Informed consent, Industrial Standards 9- Engineering as social Experimentation: Safety issues - Commitment to Safety 10- Workplace Responsibilities and Rights 11- Moral Frameworks: Honesty 12- Engineers and Technological Progress & Global Issues 13- Engineering Ethics Case Studies